HEALTH

A Journal Devoted to Healthful Living

ESTD. JAN. 1923

Edited by Dr. U. Rama Rau & U Krishna Rau M.B.B.S.

Annual Subscription : Rs. 2. Foreign—Rs. 3. Post paid.

Editorial and Publishing Offices :—

323-24, Thambu Chetty Street, George Town, Madras.

Vol. XIX. | AUGUST, 1941. | No. 8.

EDITORIAL

PERSONAL HYGIENE

A MAN is a free agent within the law to live his life as he chooses, but he owes it both to himself and the community that he should on his own part sustain and develop his native powers so as to fit him for the efficient discharge of his duties as a citizen. Theodore Roosevelt once wrote to his son : "I want you to do well in your sports, and I want even more that you should do well in your books, but I don't expect you to stand first in either, if so to stand would harm you and injure your health". The force of this advice is patent to all of us. He considers health as more important than any temporary or transient success, because the latter will be short-lived, if it is not backed up by good health. To be a good citizen you must have a sound mind in a healthy body, and without either you are a liability to your community and your country.

A healthy body in perfect physical fitness free from all diseases is within the reach of all of us if only we follow certain rules of Personal Hygiene. Faulty habits of living of the people at large are the most important factors working against national health and efficiency. Intelligent individual actions and development of positive personal health are essential to combat many communicable and organic diseases. The great body of important facts, in respect of both personal hygiene and communicable disease-control, has developed within the last thirty years. Personal hygiene is concerned, for the most part, with simple matters of day-to-day life, as the right use of air and water, and discretion in diet and cleanliness of the body.

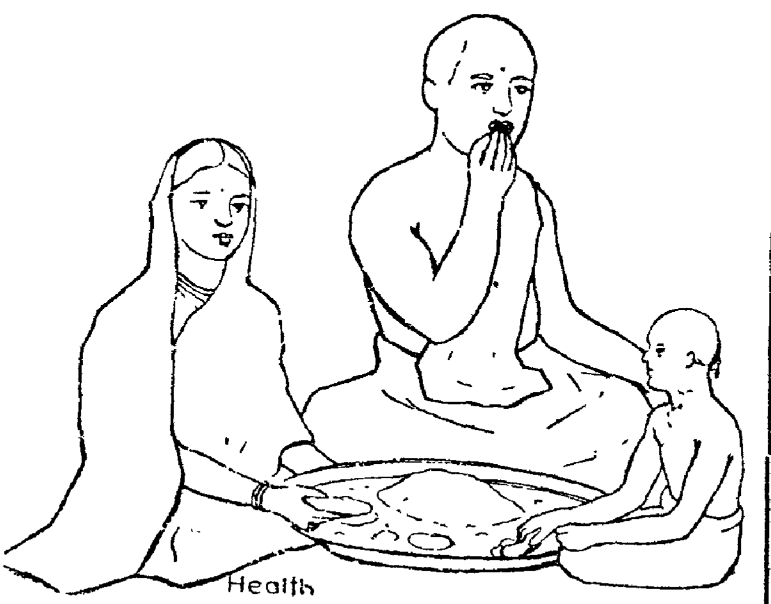
We all know that fresh air, plenty of it, is a necessity of living. Houses and offices must be well ventilated and you should live as much as possible in the open air and breathe unpolluted pure air. It has been established that water is the carrier of many diseases and we have to consume pure water if we are to avoid many communicable diseases. In cities and towns, we

are supplied with filtered water, but if we use well or tank water, we have to boil it to kill any organism in it. Wholesome and nutritious food at regular times builds up good health, but discreet you must be in your diet if you are to avoid illness. Over-eating or eating at odd moments will tell upon your health. Contaminated food should be avoided as it is the source of many diseases. Exercise is essential to build up our body and keep it in good physical fitness. Cleanliness must be our watch-word and daily bath will keep our skin free from all skin diseases. Proper attention to the mouth and to the intestines to keep them clean plays a great part in Personal Hygiene. A bad teeth or a deranged intestine will tell on our health.

Hygienic method of Eating.

Principles of Personal Hygiene are not new to us. But are we following them? Are we not by simple neglect and laziness undermining our health and indirectly of the community too? Is it not criminal on our part to disregard the simple rules of health and be a source of danger to others? This branch of Hygiene has been perfected by the ancient Hindus. What we have discovered now, they must have known it then only, because they have formulated certain rules to be followed by each individual, which are quite in consonance with our modern scientific findings. These personal hygienic principles have been so stressed that they have become part of our daily religious routine. Cleaning the teeth and mouth the first thing in the morning and after each feed, taking bath twice a day (morning and evening), wearing washed clothes after each bath, eating twice a day and not consuming anything in between the feeds, and doing Surya-Namaskaram early in the morning form part of the routine to be followed by an othodox Hindu and the principles of hygiene underlying it are quite evident. We have only recognised recently that disease is carried by dust and dirt. But to them it was no news. Cleanliness inside the house they used to rigidly enforce. Smearing the house with cow-dung will permeate bacteriophages in the house which are deadly to all bacteria and germs. Nobody should enter the house without washing his feet and hands so as to prevent dirt entering the house, and before you enter the kitchen or take food you have to again wash your hands and change to washed clothes. All these are done to prevent contamination of the food. It has been found now that many organisms live and multiply in our throat and nose. They may be harmless to us, but may be deadly to others, if they get into

their mouths and throats. They are carried by means of saliva and mouth and nose secretions. But the Hindus have known this from time immemorial. They have condemned eating from the same plate or drinking from the same cup. The residue of the food eaten by one individual should not be taken by another. Even though to your own child you should not give your "*ucchishta*" *i. e.*, residue of food eaten by one, (I am not aware of any corresponding word in English.) A Hindu will not take food in the same plate eaten by another man or sip or drink from a common cup or eat with a common spoon. All these, we know, are the medium for the spread of diseases.



Unhygienic method of eating causes the spread of diseases.
Even though to your own son, you should not give your '**ucchishta**' i e., residue of food already eaten once.

Some of us think that we are too educated to follow our old customs and rituals and the orthodox class is looking at it from a strictly religious point of view; so much so, the hygienic principles have been completely lost. They take a bath daily, but don't care what kind of water they use. They take food twice a day, but by eating so heavily the good points of moderate eating have been completely nullified. They do *Ekadasi Upavasam* (fasting) once in fifteen days, but take such heavy feed on the previous night that they will derive no benefit from the fast. The whole system requires a thorough re-organisation and re-orientation. It is worthwhile on our part to go back to our old customs and follow the rules of personal hygiene as laid down by Hindu lawgivers on scientific lines. This will be the best way to improve the general health of the individual, the community and the nation. All the public health measures enforced by the Government and the public bodies to improve the health of the community and to prevent the spread of the disease will not be of any use, if the individual does not co-operate in following the rules of personal hygiene.

Cod Liver Oil

It is well-known as a valuable remedy for consumption and other wasting diseases. Cod-liver-oil should be taken an hour or more after meals as it then passes quickly through the stomach and is less likely to excite nausea. The dose may be from a teaspoonful to a tablespoonful twice a day. If too much is taken, it either upsets the digestion or impairs the appetite or else passes away through the bowels unchanged.

CONTRACEPTIVES

IN

BIRTH CONTROL

By DR. (MISS) B. KAMALAMMAL, M.B., B.S.,

Asst. Surgeon, Aleppy.

The question of birth control has become of late a problem of very great importance to the nation. The idea was recently imported to India from America and has rather extensively invaded her. India is always susceptible to invasions.

The objects aimed at by control of birth are two: individual as well as social (public). The public interest in the question is mainly that of limitation of population, which is an absolute necessity for the welfare of a nation from the point of view of health as well as wealth. This fact is undisputed and has been recognised for years past.

There are two ways by which population can be controlled by human efforts; by marriage control and by birth control in the married.

Marriage control may be effected by the raising of the age of marriage and permitting marriage only to those who have the means of maintaining a family of average size. The observance of customs that prevent widows from remarriage and the maintenance of institutions such as the Nunnery and Priesthood, as exist in all religions, are based on this principle and the institutions are run on a more or less satisfactory line, although this aspect of their importance is not recognised to its full advantage by the public at large, when they rashly criticise their working.

The second method, or the method of limitation of family in the married, is the one calling our attention at present. Individual interest is even more visible than national interest in this part of the problem. The health and wealth of the parents, the children, and therefore the nation are saved by a solution of this big problem. The object of birth control is very noble, but how is it to be attained? What are the means by which family may be limited in the married? There are two ways open for us.

One is natural, healthy self control or celibacy, and the other is the prevention of conception by various artificial means such as physical, chemical or mechanical.

Celibacy is highly invigorating and extremely healthy to parents as well as the offsprings and is unanimously agreed as the best form of birth control, though a little hard to practise for nations other than I n d i a n s. " There is no gain without pain," and unless some sacrifice is offered,nothing noble can be achieved.

The well disciplined Brahmacharya of Indian childhood greatly helps to maintain a well controlled married life (or *Grahasthashram*) where man and woman realise that the responsibilities of conjugal life are something more than an agreement for lavish satisfaction of carnal pleasures.

Unfailing self control and the power of resisting the pleasure of the senses is a birth right of the sons and daughters of India. Complete mastery of the self is within the reach of most of us, and living examples of such great men are no rarity even today. Indian civilization will stand till eternity. It is a civilization that can withstand the test of time while that of other nations crumble before it. Therefore, to the Indian, birth control by abstinence is not an impossibility, though modern civilization has made it a little hard for him.

The safe-period union is a fairly good method for spacing of children but the efficacy cannot be guaranteed in every case because the period varies with different individuals and has to be calculated in each case.

These are the methods unanimously admitted as the best for the purpose aimed but are completely ignored in the presence of easily accessible contraceptives that flood the modern market.

In the natural conditions Nature has so arranged the human system that the physical or mental exhaustion consequent upon a conjugal union is compensated for by automatic repair in the body by the absorption of valuable harmones from the secretions produced thereby. Contraceptives of all kinds prevent this repair and weaken the body. Therefore they should be specially condemned in the unhealthy.

I do not wish to elaborate upon the technique of usage of the different contraceptives. Various chemicals have come to the market whose merits and demerits I do not describe here because, I am of opinion that they are all harmful. Reason tells us that if at all they should be effective in serving the purpose for which they are used, they should be powerful, strong enough to kill the spermatozoa, in which case they are sure to be as well injurious to the living tissue in the area around. Besides, these are not within the easy reach of the poor class unless supplied free.

The mechanical appliances are even worse. They are often defective in serving the purpose and they are harmful in many respects. Their application has to be done by trained hands. Extreme neatness is demanded in their usage so that the dirty habits of lower class or a little indifference even in others injures the local area and leaves them as gynecic patients. Cervical erosions and ulcerations, inflammation of the uterine adnexa and chronic endometritis and a very stubborn vaginitis are very common among the constant and careless users of vaginal pessaries and tampoons.

Besides, it must be admitted that the poor will not find it convenient to make use of these even if provided free at a clinic.

So, then, the net result is that we get a set of high class men and women with shattered nerves, a set of poor women with all sorts of gynecic troubles and a progeny of the poor alone! Is that what the social reformers aim at? It is therefore evident that the type of birth-control as advocated to-day is only a fashion of the so-called civilized, taken advantage of by them in the name of the society, to shirk a responsible home where the stars of the future citizens should be brought up. It is a type of imprisonment for the dutiful mother and hence a love for a misconstrued freedom.

It was pleaded with great vehemence by a lady at a Womens Conference that uncontrolled sexual relationship was essential to maintain domestic happiness and marital attachment. But I am afraid if abstinence should interfere with the affection of the couple, much more will the contraceptives do. The men or women accustomed to free conjugal relationship *i.e.* private prostitution, if I may name it so, will find it hard to abstain from it when occasions demand and will naturally deviate from the path of virtue, the contraceptive perhaps supplying them with courage. Chastity, therefore, becomes a doubtful virtue in the married. Thus, we are led to moral deterioration of society ; and that even, in the case of the unmarried.

It is the fear of society condemning their issues that mainly keeps the virgins as such; and if contraceptives can shield them, which youngster dares not enjoy a curious relationship with the opposite sex ? What is the rare accident of to-day will become an every-day occurrence but unexposed.

The free clinics will certainly afford them all facilities to fulfil their curiosities so that a stage will be reached when virgin daughters and chaste wives are a rarity to mother India who once prided over her *pathivrathas*. This is no exaggeration of facts to those who have observed the sales at the places where contraceptives are sold. I simply shudder to think of such a state of affairs when Bharathmata should shed tears of blood for the folly of her children.

Frederic Mecan, M.D.C.M., M.R.C.P., F.R.C.S., F.C.O.G., Consulting Surgeon, Free Hospital of Women, London, has published a very instructive article in the *Practitioner* on "The Physical effects of Conception Control." From his vast experience, he has come to the conclusion that contraceptives are highly conducive to ill-health, physical and even mental.

Contraception is a vice just as opium-eating or spirit-drinking. Drunkards are no judges about drinking, neither are murderers the best judges of murdering. So also the parties demanding the need for contraceptives are not the proper persons to announce a judgment on their utility; it is definitely the work of the health controller or medical authority.

The public demand for contraceptives should be condemned and money wasted on these appliances and clinics should be utilised for a better purpose —to establish centres of antenatal clinics where expectant mothers are given proper advice to take care of their own health as well as that of the child in her womb; efficient midwifery attendance should be afforded at private homes and in the free lying-in institutions, and enough child-welfare centres should be opened, so that the gems of the future generation are properly looked after.

To me, these appear as the best methods, within the reach of the public and the Government, to make a nation healthy, wealthy and prosperous. I do whole heartedly support and appreciate healthy self-control or celibacy even if it be limited in scope, but much more strongly do I condemn the practice of the prostitution method of contraception of wide-spread popularity.

Etiquette of Dining

Among orthodox Moslems: Wash your hands, face and feet. Wear a complete and loose dress. Begin with a prayer to God. Do not look about the room. Serve others before serving yourself. Do not talk or laugh while eating. The food must not be touched except by the tips of the fingers. The guest must not ask for anything. Thank others for every service done.

—*M. A. Kareem, Guntur.—Treasure Chest.*

* * * *

Among Westerners: Don't sit dumb; talk on a pleasant topic of general interest to those sitting near you. Sit straight; keep your elbows close to your body; neither lean forward on the table nor back on the chair. Don't start eating till the hostess or the guest of honour begins. If others make mistakes with their spoons, forks or knives, don't laugh. Keep alert; don't get so absorbed in eating that you forget to pass things to others or take part in conversation going on. Don't gobble or smack your lips. Neither talk loudly, nor whisper; and don't talk with your mouth full. Don't get your fingers, mouth or clothes soiled; use your serviette and finger-bowl. Don't eat a great deal of one thing simply because you like it. When you have finished, wipe your mouth; wash the tips of your fingers by dipping them in the finger bowl; put the fork, knife and spoon neatly on one side of the plate; and fold your serviette.

—*Shakuntala Gupta, Pithoragarh.—Treasure Chest.*

HEIGHT with HEALTH

THROUGH PROPER FOOD AND NON-VIOLENT EXERCISES

By R. V. LAKSHMI RATAN, *(Senior), Mylapore, Madras.*

THE growth of school-going children and young people depends upon their inherited capacity, the quality and quantity of food consumed and assimilated by them, the type of their physical work and exercises and the nature and duration of relief afforded to the head, the spinal column and to the organs of the lower extremity—from standing and sitting postures to one of lying down as for sleep and rest. Proper functioning of the endocrine glands or their derangement determines the growth and physique of any person.

Many inches upto the age of twenty-two and some inches beyond that age in most cases, may be added to one's height by creating and maintaining certain optimum conditions in respect of food, by practising regularly certain types of exercises of a non-violent nature and by attending to certain observances suggested in this article. The earlier in life these optimum conditions of feeding and special types of exercises are created and maintained, the greater will be the chances of good growth and health. Otherwise, the maximum, of which one is capable, cannot be attained.

Excess of acid or alkali in foods.—A. W. Mc. Cann quotes Sherman as saying: "It should be clearly understood that an excess of base-forming elements in the diet is not in any sense objectionable, since the oxidation processes in the body are constantly yielding such large quantities of carbonic acid that any surplus of base-forming elements goes to form bicarbonates which not only do not disturb the neutrality but act as reserve material for its miantenance".

Acid-forming foods, such as rice, wheat, cumbu, ragi, dhals, pulses, nuts, meat, fish and eggs, depress the rate of growth and development, metabolism and activity. The quantity of intake of these foods should be restricted.

Base or alkali-forming foods, such as milk, green leafy and non-leafy vegetables, tuber and root vegetables and fruits, promote metabolism, activity, growth, intelligence, nerve-vigour and an all round development. These foods should be consumed in liberal quantities.

Vitamins, minerals and protein.—Foods for growth should be adequate in their vitamin, mineral and suitable protein contents. Of the vitamins and minerals, Vitamin A, Vitamin B_1, Calcium and Phosphorus with the proper ratio between them for the growth of the bones, iron and manganese are essential factors for promoting growth. Bananas, leafy vegetables, beets, whole cereals and peas are good sources for the supply of manganese. The *Health Bulletin No. 23* (price two annas, available from Government Book Depot, Mount Road, Madras) gives the daily requirements in Vitamin A, Vitamin B_1, Calcium, Phosphorus and iron and the nutritive value of Indian foods which may be consulted. The consumption of milk and egg will, besides other valuable nutrive factors, furnish suitable protein for growth. Milk is rich in calcium as well.

Affordability.—The well-to-do and the few people on the top grades in the professions and services could afford the expense to furnish their children with the items of foods listed herein. Some might find it possible to cut down their expenses on luxuries

and on things of unproductive nature, and thus find means to feed their children, with some milk, green leafy vegetables and other items of food as largely as possible. Milk is the first and foremost among the foods in supplying calcium and protein of high biological value for growth. Milk should therefore be given to growing children as much as possible, making up the deficiency by the supply of clean, fresh gingelly oil-cake and green leafy vegetables. If milk and its products cannot be provided under any circumstances, gingelly oil-cake, groundnut oil-cake, liberal quantities of green leafy vegetables and such other cheap foodstuffs as would make up the daily requirements in essential nutritive factors, should be provided to growing children instead.

Adaptability.—Modifications in the diet suggested in this article may be to suit each individual in the initial stages, since the peculiarities of digestion and assimilation due to upbringing and food habits vary from one individual to another and with the form in which the food is taken. Faulty food habits should be given up and the body must be gradually trained to adapt itself to changed diet. Preparations should be made so skilfully as to suit individual taste, but without the loss of vitamins and minerals contained in the foodstuffs.

Foods for growth.—The daily intake of food for growth may be as follows: (1) One-quarter to one-half Madras measure of milk. (2) One egg (for non-vegetarians). (3) Five to ten tola weight of edible green leaves. (4) Five to ten tola weight of green non-leafy vegetables. (5) Five to ten tola weight of root vegetables. (6) Five to ten tola weight of green juicy fruits and bananas. (7) Five to ten tola weight of natural sweets (dried apricots, dates, figs, raisins, honey etc.). (8) About three tola weight of selected, unroasted groundnut kernels ground into a fine paste. (9) About three tola weight of dried beans, peas or dhal ground into a fine flour. (10) About one ounce of butter, ghee or oil. (11) Salt and condiment, in very small quantities. (12) The balance requirement in whole rice flour with the germs and bran intact or any millet (*thenai, cumbu, ragi,* etc.). These should be dry-cleaned. They may be roasted to convert them into puffed grains and ground into a fine flour, mixed with jaggery, ghee and water, made into balls or hoppers and eaten, if the same is found palatable and agreeable.

The quantities may be proportionately adjusted according to the requirements of each individual. A raw, uncooked "kosambari" (salad) should be prepared and consumed daily, the method of preparation of which was given in my article on "Growth of Lovely and Healthy Hair", on page 4 of the *Indian Express*, dated Monday, 16th December 1940, morning edition.

Posture.—*Health*, Madras, has, on pages 69 and 70, in its issue for March 1939, quoted as under what *Good Health (U. S. A.)* had stated in this connection:

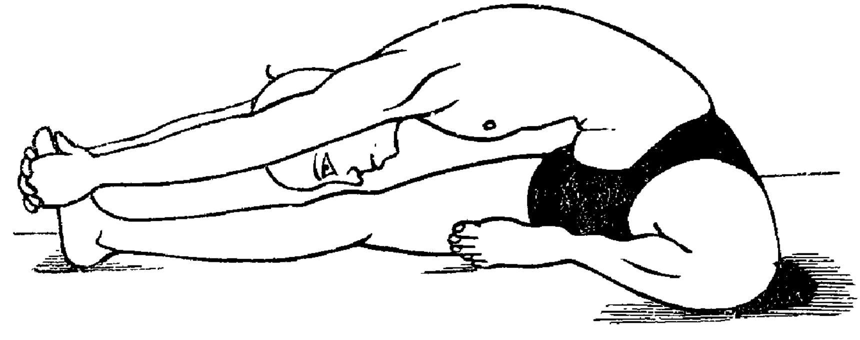
> Always sit erect, with chest held high and the small of the back supported. Sit as little as possible, Standing and lying are more natural and healthful positions than sitting.
>
> When standing, hold the body erect, the hips well back, the chest forward, the chin drawn in.
>
> In sitting, do not slump, but keep the chest up. This requires an effort which becomes tiresome if long continued, unless proper support is given to the lumbar spine or so-called hollow of the back. To keep the shoulders from dropping forward and flattening the chest, support should also be given to the upper spine between the shoulder blades.
>
> A chair constructed so as to support the lower back and the upper spine will hold the body in perfect position when completely relaxed as is necessary for complete rest. Such chairs are now available.

Exercise.—Dealing with "Some Practices for Increasing Stature", on page 147, No. 2, Volume II, the Yoga-Mimansa Journal quotes what a learned author had said in connection

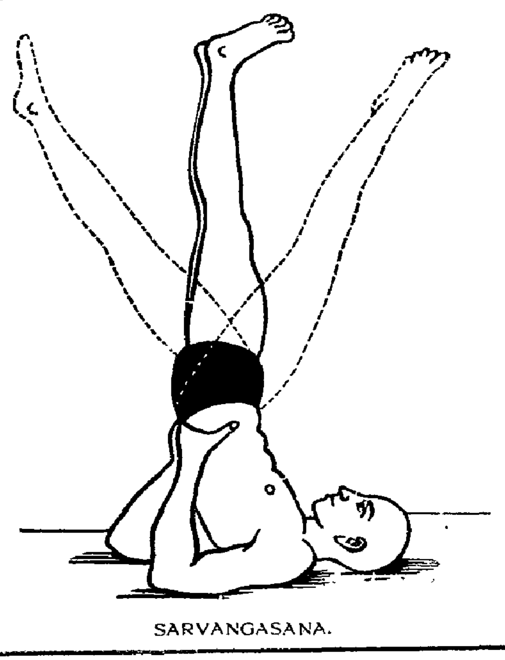
with a different system which gives expression to some of the basic principles realting to growth and development, and which is reproduced here:

" One of the important aims was to relax the flexor and tone up the extensor muscles and to open the human form into postures as opposite as possible to those of the embryo which it tends persistently to approximate in sitting, and in fatigue and collapse attitudes generally. The head must balance on the cervical vertebrae and not call upon the muscles of the neck to keep it from rolling off; the weight of the shoulders must be thrown back off the thorax; the spine be erect to allow the abdomen free action; the joints of the thigh extended; the hand and arm supinated etc. Bones must relieve muscles and nerves. Thus an erect, self-respecting carriage must be given, and the unfortunate association, so difficult to overcome, between effort and an involuted posture must be broken up. This means economy and a great saving of vital energy. Extensor action goes with expansive, flexure with depressive states of mind; hence courage, buoyancy and hope, are favoured and handicaps removed. All that is done with great effort causes wide irradiation of tensions to the other half of the body and also sympathetic activities in those not involved; the law of maximal ease and minimal expenditure of energy must be always striven for and the interests of viscera are never lost sight of".

The following exercises and observances will stimulate the thyroid and other glands, reverse the downward pressure of the body, develop the bones and nerves, tone up the system and tend to increase the height with health. (1) Backwards and forwards, side to side, movements of the head, rotating the head on the right direction and then on the left direction a dozen times for each movement of these six exercises daily. (2) Suryanamaskarams. (3) Sarvangasana (the pan-physical pose). (4) Matsyasana (the fish pose). (5) Bhujangasana (the cobra pose). (6) Janu Shirasana.

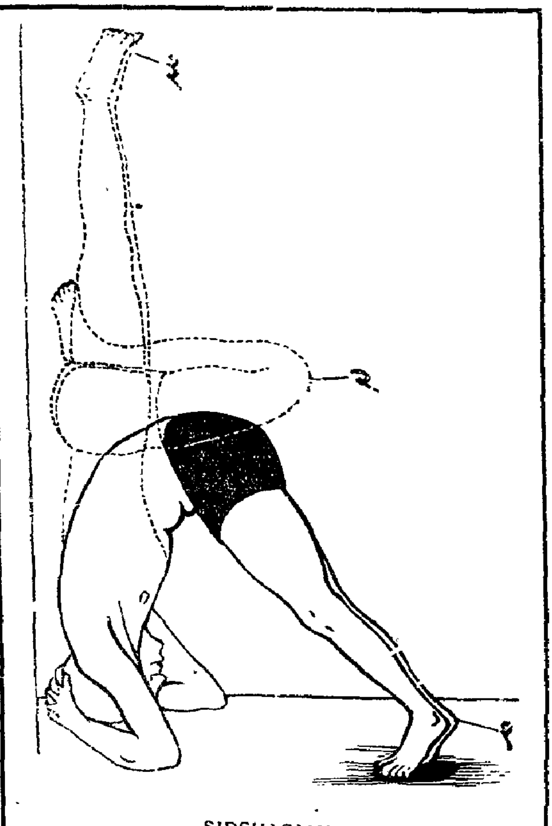


JANU SHIRASANA.



SARVANGASANA.

(7) Paschamasana (the posterior-stretching pose). (8) Sirshasana (the topsy-turvey pose). (9) Halasana (the plough pose). (10) Vrikshasana (the tree pose). (11) Uddiyana. (12) Nauli. (13) Rings and trapez exercises. (14) Spinal bath. (15) Rubbing with cocoanut, groundnut, or gingelly oil and exposing the body to sunlight for about five minutes, once or twice a week. (16) Sleeping with the support of a pillow as low as possible to the head.



SIRSHASANA.

The following books, giving description, illustrations, technique, time and duration and other details of the above items, may be consulted: (1) "Suryanamaskar" by the Chief of Aundh, (Bombay Presidency); (2) "Yoga-Mimansa Journal", the first three volumes, Yoga-Mimansa Office, Lonavla, (Bombay Presidency; (3) "Asana Exercises", by Sri Sundaram, Pleader, Bangalore Cantonment; and (4) "Way Back to Health", by Sri K. Lakshmana Sarma, B.A., B.L., Nature Home, Pudukotah.

A suggestion.—The asana exercises cannot be practised without mistakes merely with the aid of books or written instruction. They are best learnt easily and without mistakes under the direction and supervision of a trained teacher. They could ordinarily be learnt in about three months' time by devoting about half an hour daily. It will be costly to engage a private teacher to teach these asana exercises.

The schools, colleges, hostels, recreation and other clubs and such other institutions would be rendering a great service to the students or members interested in asana exercises by taking up the matter, and by considering the possibility of starting a class for asana exercises. The services of a teacher trained in asana exercises to teach interested students these exercises in a proper and methodical manner, may have to be secured. Such students or members may be charged a separate fee to cover the salary of the teacher and other expenses.

Swami Krishnamacharlu, Yoga Sala, Mysore; Swami Kuvalayananda, Lonavla (Bombay Presidency); and Sri Sundaram, Pleader, Bangalore Cantonment; Sri Bulusu Ramajogi Rao, Mylapore, Madras, may be in a position to suggest a suitable teacher.

Why We Should Chew More

By Nurse A. E. Chappell.

ONLY food which is sufficiently chewed can be properly digested and so release the full amount of nourishment it contains.

Starchy foods in particular must be well chewed and mixed with the saliva to convert the starch into a form of sugar which can be absorbed into the blood.

The drier the starchy foods are when eaten, the more saliva do they absorb ; and the more complete the conversion into sugar becomes, the better is the body nourished.

Undigested food, in fact, necessitates energy to deal with its elimination, and gives nothing in return. Often enough, this waste food makes the difference between being well-nourished and under-nourished on the same quantity of food.

Sir Walter Raleigh is said to have composed the following lines :

"Only beggars clothed in rags
And gluttons old in sin,
Mistake themselves for carpet bags,
And tumble victuals in."

Today, there are many who are neither "beggars" nor "gluttons", but who decidedly act according to Sir Walter Raleigh's description.

Hungry children home from school often bolt their food as if in a race to see who can finish first. Usually, they are supplied with drink of some kind and take a bite and then a drink "to wash it down".

Mothers often tell them not to eat so fast, but it is "no use" they say. Yet even little children can be taught by patient example. I remember one domestic science mistress, who was also a wife and mother, teaching her little one to chew. She showed her how she chewed, and the child was soon making a very good imitation of her mother's crunching of hard toast, and enjoyed the game.

The difficulty can be corrected with older children by getting them to take all the water they need before their meal begins. Milk, on the other hand, is a food and should be used at the end of a meal. It should, moreover, be sipped, not gulped.

Bread can be made more attractive if cut into fingers and made crisp, like biscuit, in a moderate oven. This can be done when other things are finished, and if kept in an air-tight tin after they have become cold, will remain fresh for some time.

If you insist on the children chewing their food well, and you set the example, you will soon find that you and they suffer less from stomach trouble, your bread bill go down, and your health and the children's will improve.

Not the least advantage of thorough mastication is that it causes increased circulation in the gums, thus nourishing the teeth which need a constant supply of repair material to keep them in health.—*The Oriental Watchman.*

Castor Oil

The best oil is obtained by pressure without heat. (Cold drawn). It acts as a mild, speedy and certain aperient, causing little or no straining and may, therefore, be used in occasional constipation of children or pregnant women. A drop of castor oil is a good application to the eye after dust or grit has been removed.

THE DEVIL'S AGENTS
(THE HOUSE FLIES)

By
DR. S. BALASUBRAMANIAM, M.B.,B.S.,
Mylady, S. Travancore.

THAT night Vimala finished her lessons early and went to her father and requested him to tell a story.

The Doctor, (her father) said, "Alright. Come here, and sit down. I shall tell you a short story"

Vimala sat down near her father and began to hear with rapt attention.

Dr. :—Have you heard of Angels dear ?

Vim. :—Yes, father.

Dr. :—What do you know about them?

Vim. :—They are supposed to be messengers of God. They have wings; they carry good things and happiness to mankind.

Dr. :—Well. Tonight, I shall tell you the story of the agents of the Devil. Like Angels, they also possess wings; but, they carry bad things and unhappiness to mankind. Now, hear the story:— Once upon a time the various diseases that trouble mankind went to the Devil and paid their homages and prayed :

"O ! Lord ! We are in trouble. Save us from this calamity. We are not now able to attack men as before. They don't allow us to go near them."

"Then the Devil said :—Is that all ? Don't be afraid. I shall send my messengers to help you. They shall fly to your help." So, the Diseases took leave of the Devil.

As promised, the Devil sent its agents.They flew to the world. Now you see these agents wherever you go. They now help the diseases to spread easily. Who are these agents ? Do you know ?

Vim :—No, father.

Dr. :—They are the **House-Flies**.

Vim. :—Are they the Devil's agents ? They are small innocent things, which don't even bite anybody. Then, why do you call them the Devil's agents ?

Dr. :—They appear to be small, innocent things, but, really they do a great amount of damage to mankind.

Vim. :—How is it, father ?

Dr. :—The other day, I told you how a fly sits on the stools of a cholera patient and then flies and sits on our food, thus transferring the cholera germs from the cholera stools to our food and through that into our body, thus spreading the disease. Similarly, the flies spread diseases like dysentery, typhoid, tuberculosis, diarrhœa of infants, anthrax, diphtheria, hook-worm disease, etc.

Now do you agree that these flies are really the Devil's agents ?

Vim. :—Yes.

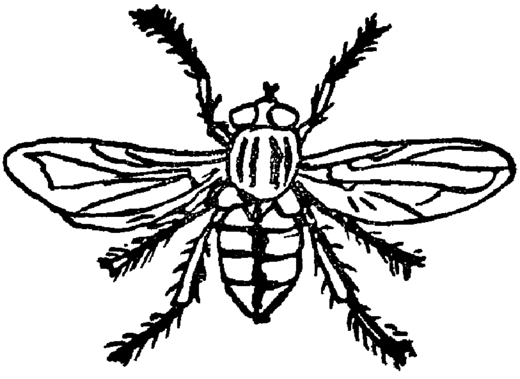
Dr. :—Now, I shall tell you the story of these flies.

The house fly has two pairs of wings. Its body is made up of three parts--the head, thorax and abdomen. It has three pairs of legs and a proboscis is for sucking food.

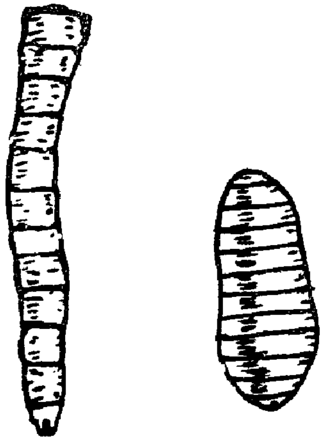
The female house fly lays from 120 to 500 eggs at a time. Each female fly may lay 5 or 6 such batches in its life time.

The eggs are small, shiny, white grains just visible to the naked eye. The eggs are laid on decaying matter, dungs of cattle, human excreta etc. They hatch into white, leg-less maggots within 8 to 24 hours and grow rapidly, feeding on the decaying materials. Within 2 to 4 days, they become half an inch in length.

The maggot then crawls to dry earth and becomes what is known as the pupa. That is to say, it covers itself with a thin coat made of a secretion produced by itself. In this state, it remains stationary for 5 to 7 days.



The House-fly.



The Egg and Larva of House-fly.

The adult fly comes out of the pupa and begins its notorious work.

Vim. :—Can't we protect ourselves from these flies, Papa ?

Dr. :—Certainly we can. We can safeguard ourselves against these flies by the following methods :—

(1) By keeping our houses and surroundings clean, thus allowing no place suitable for the breeding of the maggots. If this method should be successful, the whole population of the village or city should adopt it.

(2) Destroying flies by all possible methods :—(*a*) Fly traps ; (*b*) Fly papers ; (*c*) and other ingenious methods that may be devised.

(3) Disposing off of our excreta by hygeinic methods, thus not exposing them to breeding of flies.

(4) Protecting our food-stuffs from fly-contamination.

Now, how do you like the story, Vimala ?

Vim. :—This is no story Pappa. You have simply given me a lesson on Public Health under the guise of a story.

Dr. :—Yes dear, what you say is quite correct.

Chalk

Prepared chalk is made by finely grinding and stirring up with water after which it is allowed to settle slowly and then dried. It is used externally as a dusting powder or tooth powder and internally to correct acidity or stop diarrhœa.

ORIGIN AND EFFECTS OF BETEL CHEWING

By DR. C. B. SHROFF, M.B., B.S.,

THE subject of Betel Chewing does not only concern India, but we find that this custom is prevalent even in other countries like Malaya, Dutch East Indies, Siam, Burma and French Indo-China.

Having observed the horrors of 'pan' chewing in mouths that have chewed pan out of numbers, this subject has constantly agitated my mind for a very long time.

This subject has a tremendously long history of usage behind it and requires a very critical examination. Like all habits, good or bad, when this custom grows tremendously, it produces a very serious influence not only on the oral hygiene but even on the general constitution of the body. In short, a pan chewer of this category not only becomes a nuisance to himself but even to his surroundings, and hence the importance of this subject, concerns not the dentist alone but also the general practitioner, as well as to the lay public.

Coming to the origin proper; in ancient times, physicians prescribed pan incorporated with various substances like lime, catechu, betel-nut and spices like pepper cardamom, clove and nut-meg, as a remedial agent for various ailments.

The Thakore Saheb of Gondal, in his book on "History of Aryan Medical Science" says, "After dinner, aloe-smoking or chewing of pan (betel leaf) with certain aromatics and spices is advisable; for it has the property of expelling the phlegm which increases after dinner". (Page 69.)

The pan is astringent, exhilarant, aromatic, stimulant, carminative, aphrodisiac, light and heating. It is a good expectorant, generates semen and blood in the body and lessens wind and fatigue. It removes all fetor from the breath and imparts fragrance to it and improves the voice.

The ancients fully realized the harmful effects of pan on those suffering from tooth and eye diseases, who have taken an opening dose or who are in an intoxicated state. The following are the actions and uses of the various ingredients of pan as described by well known authorities.

Pan or tambul, betel-leaf, pepper (Piper's betel) is an aromatic sialagogue, allaying dryness, thirst and the sense of hunger when chewed. It also acts as a stimulant to the gastric glands and acts as a carminative. Its taste is warm, aromatic and bitter.

Catechu or katu is an extract of leaves and young shoots of uncaria gambia. Principal action is astringency, the preperty of diminishing the amount of secretion of living tissues. It is also an aphrodisiac *(kamagni sandeepanam)*. It contains an aromatic volatile oil containing a phenol called chavicol, a powerful antiseptic and an alkaloid "arakane".

Catechu nigrum or black catechu is an extract prepared from the wood of acacia catechu.

Lime or calcii hydras or popularly known as slaked lime is a white powder strongly alkaline, soluble in cold water. The local effect of lime is antacid, like that of alkalis, combined with an astringency, peculiar to itself. It raises the tone of the heart and the vascular system.

Cardamomi semina are highly agreeable, slightly stimulant, flavouring and carminative agents.

Cinnamon possesses the same action and is used as other aromatic substances. The astringent action of catechu is likely to be neutralized by the

alkaline action of the lime and so causes it to loose its astringency and the other ingredients are merely digestive, flavouring agents and gas-and intestinal stimulants which I do not think could produce any injurious actions on the gums. So also supari or puga, that is areca or betel nut has been used as a stimulant, astringent and a vermifuge or (*criminashak*). It is also prescribed to increase the flow of saliva, harden the gums and sweeten the breath. It contains tannic and gallic acid, oily matter and three alkaloids.

The efficieney of these drugs is proved beyond doubt, so much so, it led to a regular habit of offering pan supari before and after meals to their guests among the ancient Hindus.

The property of sweetening the breath was very much appreciated by the house-wife and it became a regular bed-chamber routine prescribed by religion. The ancient physicians also prescribed it to people suffering from impotency for exhilarating and aphrodisiac effects. That original idea of medicinal property is now entirely lost and the routine alone now continues in houses of ill-fame, where it is used incorporated with substances like spices, tobacco, menthol and cocaine crystals and wrapped up in gold or silver leaves to attract visitors. The delicate stem of pan is supposed to produce sterility so common among them.

So much about the origin of pan chewing.

Dr. Bourhis, writing in Le Review de Stomatologie, has made a study of betel chewing as practised in Anam and Toukin in French Indo-China. He says that chewing of betel has a stimulating and carminative action in addition to the properties possessed by the constituents of the quid.

The arecanut is antidiarrhœic, digestible and anthelmintic. The betel leaf deodorizes the mouth and prevents dental caries. The lime is a useful source of calcium. The areca-nut and betel leaf have no local irritating effect and the lime which is slaked does not affect the enamel. The saliva and the mixed juice have no injurious effect upon the gums of buccal mucous membrane. There is simply stimulation of salivation due to the presence of a foreign body in the mouth. When swallowed, the juices cause no disturbance but, according to the natives, prevent dysentery. In short, the quid assists digestion, disinfects the mouth, prevents dental caries, and improves the circulation.

This is only true in cases when it is carried out in strict moderation. But there is another and darker side of the picture. The habit of betel chewing is a very prevalent custom amongst the Hindus and Mahommedans. So much so, it is not surprising to daily come across people who chew a hundred or more quids in the course of a single day, and go to bed and may fall asleep with an extra large quid in the mouth.

The following points are important to be noted regarding excessive chewing of betel:—

1. The betel chewer is constantly stimulating his salivary gland to action when there is nothing in the mouth to act upon. This involves an enormous waste of saliva which is expectorated instead of being utilised to fulfil its natural function as a solvent of starch.

2. By constant chewing, the incisal edges of the anterior and the occlusal surfaces of the posteriors particularly, get worn out.

3. The fibres of the betel leaf and the betel nut get packed in the interproximal spaces until gradually the festoons of the gum between the teeth are forced lower and lower.

4. All observers agree that betel chewers are immune to dental caries but that fact is compensated by the fact that 75% of the adult pan chewers

in India suffer from pyorrhœa alveolaris, a term loosely applied and used as a synonym for periodontoclasia. Pyorrhœa alveolaris means a flow of pus from alveolar socket. Strictly speaking, periodontal disease frequently occurs without pus formation.

5. The body gets charged with excess of calcium in the system which comes up in solution in the saliva and is deposited as serumal tartar.

6. The catechu discolours the teeth to a dirty red which is impossible to remove even with a brush.

7. The mucous membrane and the gums lose their sensibility to a greater extent.

8. Like the smoker's, the throats of pan chewers have been constantly irritated and they suffer from granular pharyngitis.

9. Cases of cancer of the tongue, cheek and larynx are quite common from the over-use of betel.

10. Ophthalmic lesions, dyspepsia and diarrhœa are noted.

11. Also the various other systemic diseases occur due to pyorrhœa which is the direct result of betel chewing.

It seems that like all good things, betel chewing is a good remedial agent for several diseases including the spongy bleeding gums, but is very much abused now-a-days. In small doses, and, if used only when needed, it certainly works as a carminative and digestive, but in such big and frequent doses as is used now-a-days, it indeed clogs the wheel of digestion. It is very important therefore that such a deleterious custom should be eschewed altogether. *Dental Centenary Number of Medical Digest.—The Burma Medical Journal.*

PREVENTION OF RESPIRATORY DISEASES

By CAPT. H. G. D. MATHUR, B.Sc., M.B., B.S., D.T.M. & H., M.P.H., M.R.C.P.E., D.P.H.,

Professor of State Medicine, Lucknow University, Lecturer, Provincial Institute, Lucknow.

Ventilation.—Ventilation is the most important single factor for control of respiratory diseases and would include not only the external ventilation of houses achieved by judicious town-planning, providing adequate " lung " spaces in the cities, but also the ventilation in the house and the room as also the free ventilation of the lungs by the absence of obstruction by nasal congestion, hyperplasia (abnormal multiplication of cell tissue) and other defects. Defective ventilation not only reduces considerably the resisting power of mucous membrane but also prolongs the life of the infective micro-organisms. Requirements about the basis of ventilation have undergone changes and it is finally agreed that real basis of adequacy of ventilation is the cooling power of air. When due to the presence of a number of persons in a room, one starts feeling some discomfort, it is due to the fact that the body heat is not lost rapidly enough into the surrounding air owing to its having become warmer, more humid and stagnant. If the air is not cool enough, nor dry enough, nor adequately moving, at first there will be a vasodilation of the superficial vessels of the skin, and later, sweating to increase the heat loss. A number of instruments have been developed for objectively measuring the cooling power of the air, but the most convenient and quite a reliable guide can be the first subjective feeling that one will get on walking into a room from the fresh air outside; if one feels the room stuffy, it is almost inadequately ventilated. Care should, however, be taken to notice the first impressions ; for, soon the

sensibility gets dulled and becomes unresponsive.

Immunisation.—It is not possible to confer any immunity by the use of toxins or vaccines.

Nutrition.—The presence of a good reserve of vitamins A and B has been found to be a good protective, both against the disease itself as well as against the development of untoward and serious complications during its course.

Over-crowding.—This effect is intimately connected with inadequate ventilation. The effect is produced more markedly through increasing the changes of transference of droplet infection. Overcrowding is responsible to a great extent for the epidemics of cerebro-spinal fever and the spread of tuberculosis.

Ignorance or lack of information about the manner of the spread of the disease is indirectly causing the disease. A doctor who comes in contact with the patient and his relations is in an unenviable position to spread correct information about the causation of these diseases and the measures that are possible for combating them within the means of the family.

"Carriers".—A "Carrier" is one who carries the disease bacteria with him without himself being attacked by the disease apparently. In many instances, it is not easy to detect the carriers, and in a small proportion of all carriers, it is impossible to eradicate the infection and render them safe. The percentage of carriers (normally about 2%) increases markedly upto 20% after an epidemic.

Droplet Infection.—In talking, singing and shouting, very small drops of mucus are projected from the mouth. These small drops remain suspended in the air for a short time and get carried about. FLUGG was the first to suggest that these tiny droplets of mucus contain micro-organisms from the naso-pharynx and thus infection of persons inhaling them can take place. Obviously, the shorter the distance the greater are the chances of transference of infection in this way and the infection of nursling by their mothers is heaviest. Sneezing and coughing would easily result in the 'Droplet' infection—droplets being carried to a distance as great as 30 ft. Many of the contagious (as distinct from infectious) diseases are spread by droplet infection. Even when the droplets dry up and fall to the ground, the contained micro-organisms will be present in the dust on the floor.

These, in short, are the main points which must be borne in mind by every man, and when these preventive steps fail and the diseases actually make their appearance, expert aid should be sought for.—*The Antiseptic, Pp. 830, October, 1940.*

Alcohol and Digestion

In recognition of the menace which strong drink holds for the people of this country, the *Quarterly Journal of Studies on Alcohol* has been established. It is conducted in New Haven, Conn., by a group of physiologists, psychiatrists and others interested in public health. The first number contains an article by Beazell and Ivy on the influence of alcohol on the digestive tract. They found that the drug in concentrations of more than ten or fifteen per cent increases the secretion of mucus, probably because it irritates the stomach.

Whisky, rum, brandy and other hard liquors may cause inflammation of thestomach with lack of hydrochloric acid. This condition becomes chronic in the habitual drunkard, due in part to the poison itself and partly to an associated dietary deficiency. Alcohol often causes peptic ulcer. It interferes with digestion by precipitating pepsin, so rendering the gastric juice useless. It destroys appetite by paralyzing the stomach, so that it does not signal for food by so-called hunger contractions. In the same way, it causes retention of food in the stomach, with damage to the digestive process, produced not only by hard liquors but by beers and wines containing only five or ten per cent of alcohol.

One of the most damaging effects of alcohol upon the body is the injury it does to the liver by paralyzing some of its most delicate functions, and causing cirrhosis, the so-called gin liver.

Provision of Latrine Accommodation in Villages

By CAPTAIN T. R. RANGASWAMI, M.B., B.S., B.Sc., A.I.R.O.,
Indian Military Hospital, Bangalore.

BORE-HOLE latrines work satisfactorily and there is no nuisance on the ground of smell. Further, they require very little space for erection. A bore-hole latrine used by four perpersons will last almost permanently without the necessity of its being shifted from one place to another, provided tree growth is encouraged around it. If there are more than four persons in a family it is recommended that one seat be provided for every four persons. The tree or crop may be lime, orange, mango, sapota, country-goa, papaya, banana, margosa, pungan, raintree, pooarasu, avisichettu, or seema-chinta-chettu (in Telugu) or any other tree which may suit the convenience of the parties concerned. One individual on a mixed diet evacuates 6 ozs. of night soil and 40 to 50 ozs. of urine per day, and the nitrogen content of these comes to about 10 pounds of organic nitrogen in one year. The idea of growing trees is to deplete the soil of this and thus keep it sweet and clean round the latrine. Trees near bore-hole latrines grow very much better than trees elsewhere under similar conditions. The writer had occasion to put up a latrine between two trees on a road margin. The two trees on either side of the latrine swelled in girth and the leaf growth increased enormously within a month, in marked contrast to the other trees that were in the same row and did not show any extra increase in size. It was a useful demonstration to the public of the high manurial value of a bore-hole latrine. From the public health point of view, it keeps the soil and the air pure. Further, the nitrogen can be utilized for the growth of useful fruits rich in vitamin C, or of green leaf for cattle or goats or converted into edible green leaves rich in vitamin A. If preferred, the leafy growth of trees can be cut and used as green manure. This is greatly in demand, especially in deltaic areas. Tree growth will keep the place cool, allay the dust nuisance, and will add to the fuel and thus release cowdung for the fields; as it is now, a certain amount of dung is converted into dung cakes for fuel, which is an economic loss.

In these days when much attention is paid to the conservation of humus in soil of intensively cultivated areas, every attempt should be made to conserve humus, especially when lack of attention in dealing with the night-soil problem is a distinct danger to the community. With a little amount of forethought this dangerous material can be converted into valuable humus. Calculating organic nitrogen value on the basis of groundnut cake cost at Rs. 50/- per ton which contains 8 per cent nitrogen, the manurial value of the contents of a bore-hold latrine used by four persons will be worth about Rs. 12-8-0 in a year. The capital cost per individual for providing a bore-hole latrine comes to Rs. 25/- for one seat—Rs. 6-4-0 per individual 4 users—and this initial outlay, in addition to solving the latrine problem, gives an indirect return of 50 per cent which will more than cover the interest, depreciation and maintenance charges. The indirect benefits to the garden by letting in the air to a depth of 18 feet in soil are: (1) æration of deeper layers of soil; (2) giving facilities to tree roots to go down near the sides of bore holes—potassium from the deeper layers of soil will be sucked up to the surface; (3) increase in the live and active layers of the soil. Thus, the bore-hole latrine scheme can be made to pay

for itself and valuable organic matter can be conserved in the soil and human beings will get the benefit of suitable latrine accommodation resulting in diminution in the incidence of hookworm and other intestinal parasites, and cholera, typhoid, diarrhœa and dysentery bacilli will be killed by coming in contact with septic material. The rich and certain harvest in the betterment of the public health is a benefit of incalculable value. A rough estimate is given below :

		Rs.	A.	P.
Latrine slab	...	2	8	0
Boring charges	...	1	8	0
Zinc sheet	...	10	0	0
Timber, etc.	...	3	0	0
Construction charges	...	3	0	0
Unforeseen charges	...	5	0	0
Total	...	25	0	0

For places where other materials such as thatties, bamboo-matting, cocoanut or palmyrah leaves, or date matting are available,or where planks are cheap, the cost of zinc sheets can be avoided. The main thing is to have the bore-holes and slabs, and to adopt any suitable screen from old zinc sheets, empty tar barrel or oil barrels. Mud walls can be erected wherever possible.

The writer of this note has observed bore-hole latrines, used by four persons per seat, working for more than three years without a tendency to fill, without emitting smell and without the necessity of re-boring. The Director of Public Health, Madras, inspected some of the latrines in the Nilgiris, and had occasion to remark on the absence of smell and inquired whether any special arrangement had been made to eliminate it. All the sanitary staff in the district are impressed with the advantages, or real necessity of having tree growth and the secret of success was in their understanding the details and implicitly carrying them out as a routine.

Summary.—1. An economic method of approaching the problem, the scheme being self-supporting, is outlined.

2. Tree planting is encouraged with direct and indirect benefits; one cannot over-emphasize the necessity for tree planting.

3. Soil is kept sweet and pure.

4. Destruction of bacteria of typhoid, cholera and dysentery from carriers from the moment of evacuation as they come in contact with septic material.

5. Hookworms and other intestinal worm infections will be prevented from spreading, so as to avoid their contact with feet of human beings and flies cannot get access to the disposal chamber.

6. Green leaf and manure is made available and more profitable and vitamin-yielding fruits as well as leafy matter can be made available.

7. It is aesthetic and entirely free from bad odours or gases.

8. It is the most natural method of dealing with the problem. Dangerous filth of human beings is used as food for plants, and plant products (only too welcome to human beings) are made readily available.

9. Contamination of wells rarely happens in practise and can be completely eliminated if, on 35 feet round latrine seats, trees are grown at intervals of 6 feet.—*The Indian Medical Gazette.*

Carbuncle

Differs from a boil in being larger, more inclined to spread, more painful, usually single and provided with several openings. It usually occurs on the nape of the neck, and shoulders. The swelling increases and becomes dusky red; openings form through which the core is gradually discharged piecemeal. A good surgeon's advice should be promptly obtained. In early stages, poultice may be applied. Starch poultice and linseed poultice are the best or hot boric fomentation may be given with advantage.

Cheese

THE high nutritive value of cheese can be seen by comparing it with its nearest equivalent, dried milk. The most marked difference is that the carbohydrate content of dried milk is about eleven times that of cheese. Cheese contains relatively less of the vitamins B and C and of certain minerals than whole milk. To this extent, at least, cheese is inferior in nutritive value to whole liquid milk.—*King George's Medical College Mag.*

Whey

THE nutritive value of whey is considerable. It is relatively rich in sugar and mineral elements and also contains significant amounts of protein and vitamins, B and C. It is, like butter and cream, an imperfect food and its proper place in diet, like that of butter and cream, would be to compensate for corresponding deficiencies in other perfect foods. Thus, whey would add considerably to the nutritional value of a diet containing cereals and cereal products.—*King George's Medical College Mag.*

Effect of Heat on Milk

HEAT does not significantly lower the food value of milk for man. So far as is known, the only significant change effected in the composition of milk by heat is partial loss of vitamin C. and possibly of iodine. These deficiencies can be made good in the diets of babies fed exclusively on cow's milk by addition of fruit, or vegetable juice or codliver oil. Milk may become contaminated with the organisms of disease in two ways:—(1) Firstly organisms from a diseased cow to its milk and through the milk to man; (2) Organisms from the milker's or from infected utensils.

These organisms, however, can be destroyed and the milk rendered safe for consumption by suitable heat treatment such as by efficient pasteurisation or boiling.—*King George's Medical College Mag.*

Miracle of Cow-milk!

THE story of milk and the milk industry is a romantic one! Every morning 30 million bottles of milk are left on the doorsteps of America. Behind these bottles is the world's most efficient system of distribution, beginning from the moment the milk leaves the farm to the time it is delivered to the housewife. The dairy industry and health authorities have worked together to obtain the safest milk in the world. Upon the purity of this milk depends the most precious crop in the world: the two million babies that begin life in our country each year. Fifty years ago one out of every five babies died in its first year of life. Today, out of every 20 babies born, only one dies. This achievement has been made possible through pure milk and contributions of modern medical science.—*Municipal Gazette.*

Butter

THE fatty part of the milk separated by churning. A valuable and easily assimilated article of diet. Should consist of not more than 12 per cent of water—the rest being mainly of fat. Butter easily turns rancid especially if made from sour milk or in dirty vessels, or if insufficiently washed. To enable it to keep better salt is added. Salt butter should not contain more than 35 grains per ounce. Rancid butter can often be restored by washing and working in plenty of cold water.

Butter-milk

A THICK somewhat acid fluid left after churning. Contains some butter, fat, casein and lactic acid derived from fermentation of the milk sugar. It is a highly nourishing and easily digestible drink, valuable for invalids who cannot digest fat and for children who are losing weight.

Camphor

A CRYSTALLINE white volatile solid obtained by distillation from the wood of a Japanese forest tree. It dissolves easily in oil or spirits of wine. Camphor water is made by leaveing a few lumps in a bottle of water. For outward application, camphorated oil (one ounce to 8 fluid ounces of oil) is used. It is used as an ingredient of tooth powder. Embrocations are useful as counter-irritants to promote absorption and to cure itching. Internally given in early stages of cold in the head. In diarrhœa, colic, hysteria and in some stages of fever also it is given.

Longer Life by Eating Less

ESPECIAL emphasis is now laid by nutrition experts on vitamins and minerals in the dietary, but Professor C. M. Mc Cay of Cornell University reminds us that calories have not lost their importance. In an address to the American Dietetic Association (*Science*), he tells of lengthening the life span of white rats by restricting the amount of nourishment they received Some groups of the animals lived 900 days, which would be equivalent to ninety years in human beings. One attained the age of 1,400 days, which would correspond to the reputed record of Thomas Parr, who died in 1653 at the age of 152 years and 9 months.

Thin rats enjoyed significantly longer spans of life than fat ones, but emaciated animals died as early as the overfed. A diet, low in calories, slows growth and lengthens the life-line. At 500 days, only one rat in ten on a retarded regime had diseases of the lungs and middle ears, while half of those on the normal rat diet had these ailments. However, Professor Mc Cay sees little advantage in long life if the latter years are to be passed "with one foot in the grave." The aim should be to prolong the active period of middle life and to alleviate the suffering of old age.—*Good Health.*

Do You Know

1. That good health habits are best formed in the beginning years of your child's life?

2. That the best service you can render your child is to teach him good eating habits?

3. That a child will enjoy his food if feeding time is calm, unhurried and pleasant?

4. That a baby will take to new foods more readily if he is given one at a time and learns to like it before another is tried?

5. That a steady gain in weight is the best single sign of good nutrition and sound health in general, not only in an infant but in the growing child as well?

6. That evaporated milk should not be confused with sweetened condensed milk, which is not a suitable food for most babies?

7. That quiet, peaceful surroundings, adequate rest and sleep, proper food, safe drinking water, fresh air and sunshine, exercise, protection from disease, periodic examinations secured for your children by you, mark you as an intelligent, understanding parent?

8. That babies who do not have enough sunshine may have a substitute in preparations containing vitamins D and A, and that only your doctor can best advise you on how and when to give your baby this substitute for the sun?

9. That a child should be taken to the dentist at regular six-month intervals from the time he is two years old?

10. That a child is sometimes not hungry at meal-time because the day's activities have not been well planned?

11. That a child or an adolescent seldom admits being tired and that it is a parent's responsibility to see that he gets the rest he needs?

12. That it is wise to keep a record of your child's weight, height and illness?

Bacteria Bombs

Bacteria bombs are said by Dr. Charles F. Bove, of the American Hospital in Paris, to be amongst the weapons which Germany has in store. The bacteria are said to be typhoid, typhus, dysentery and cholera, "You don't understand the Germans," said Dr. Bove. "If Germany is losing she'll use anything and everything. Hitler has not used gas and disease bombs because he hasn't had to. But he has them. In the bacteria bombs the germs are in a dormant state, but after four or five hours in the sun they revive". We have ourselves heard of strange threads resembling spider web, and fully impregnated with germs. which have been found in this country after German raids. But it appears that the germs are dead and we very much doubt whether any dysentery germ could survive so much as five hours in the sunlight in the open air. Cholera might have a better chance and typhoid is a fairly hardly germ, but it is yet to be shown that typhus can be carried otherwise than through the bite of the louse. We hesitate to believe that Hitler's bombs are so made that they can bite us first and implant the germs afterwards. For these and a variety of other reasons we are not unduly apprehensive of war on the bacteria front.—*Medical World—April 18-1941.*

The Nails

"BY far the greatest source of nail trouble is an un-balanced dietary, which is deficient in minerals. The delicate pink colour of healthy nails is due to the healthy tissues underneath, imparting their own colour to the nails exactly as in the case of the cheeks. Thus, in anæmic subjects. we find pale, whitish nails, and in advanced stages of heart disease, the nails may have a bluish tinge. Brittle and rigid and deformed nails are generally attributed to a deficiency of calcium and vitamins D and B, which are essential to healthy nail-growth. Nail afflictions of the type mentioned are common in expectant and nursing mothers owing to the demands of the farmation of the body structure of the child, or maintenance of the milk supply or the calcium content of the body having caused a serious deficiency. When illness, especially, accompanied by fever, occurs, the nails show transparent ridges or indentation where the nail-growth was interfered with and then resumed normal growth. For the attainment of beautiful pink, healthy nails, the special necessities are a sufficiency of vitamins D and B_2 Calcium and Biticon which latter is also needed for the building of new cells.—BY T. H. BARKER. M. PN. S.—*Health for All.*

Cattle Diseases and Man

PARASITES which are common to man and animals do not produce similar diseases in dis-similar-hosts. Brucella abortus gives undulant fever in man and epidemic abortion in cattle. The parasite has naturally established in cattle, but at present it is adventitious in man. Possibly, it may become habitual to man. If it is doing so the reaction of man will tend to resemble that of its normal host.

Mastitis, for example, in cows has direct concern with human epidemic sore throats. The most frequent parasite of bovine mastitis is Streptococcus agalactiae, which is not parasitic upon man, but the udders of the cows become infected with types of Streptococci Pyogenes, which are exceedingly dangerous to man. Infection of cows is probably always derived from a human source. We are certain that these Streptococci have set up severe epidemics of human diseases, the best known of which is the Brighton-epidemic. Cows with healthy udders may be infecting their milk with Streptococci dangerous to man, and cows with marked mastitis will give pathological milk, but it may not be dangerous to man.

Another cause of mastitis is Corynebacterium pyogenes. This is not the diphtheria germ, nor is pathogenic to man. Out-breaks of diphtheria are occasionally spread by milk. Inquiring into an out-break may lead to the discovery of a Coryne bacterium from the udders of a cow supplying the milk. But in drawing any conclusion, therefrom, the rule must be followed that a Corynebacterium recovered from anywhere but a human pharynx is held to be innocent until its virulence has been proved.—*Medical Officer.*

Carron oil

Equal parts of lime water and gingely oil or cocoanut oil are soothing dressing for burns.

First Aid.

If bleeding is present, attend to it first ;
A man can't live long if an artery's burst,
Look for spots where blood gushes and spurts
And tie a tight bandage above where it hurts.

When shock is apparent, what must we do ?
Give warmth to the patient,comfort him,too.

His lips may not tell you how poorly he is,
His forehead is clammy, and look at his *fiz*,
Its pallor is awful, his breathing is weak,
These signs must guide you.he can't speak.

A cervicle fracture treated with care
May, aided by surgeons, lead to repair.

So stiffen your stretcher and pad his neck,
His feet be tied, his movement you check ;
Then tie up his knees, please don't be slack,
Break's in the neck, so he rides on his back.

When dorsal or lumbar vertebræ break,
Greatest of care with the patient you take.
He rides on his *tummy* with maximum ease,
Pads' neath his shoulders & abdomen.please.

Burns though common, are still your affair,
Just apply a dressing and keep out the air ;
Don't break blisters, they help in healing,
And don't forget your patient has *feeling*.

A wound when it's open should sterilised be,
Wash *down* from the spot, not *over* ; you see.

There may be germs from flesh overhead—
Danger arises when germs and wounds wed.

When handling dressings, just make it a fad
To keep your hands clear of sterilised pad,
And then tie the bandage neatly and firm,
But never so tight to make the man squirm.

Remember this always, *and note it well!*
A life, for a time, may depend on your skill,
So give your best to the fellow who's ill ;
Don't grudge him time,nor treat with haste,
A too hurried job may mean his life's *waste*.

A word of good cheer and a calm smiling face
Will help a sick fellow wherever the place.

—I. MORRIS.—*First Aid.*

Underground Hospital Completed at Basle, Switzerland

BASLE, ancient Swiss border town, has just completed a subterranean hospital which combines the very latest equipment for the nursing of the sick and the wounded. The building has been planned in accordance with the principles governing fortress architecture, and is expected to be strong enough to resist the heaviest bombs. It has four exits.

The underground hospital is primarily intended for persons wounded or poisoned by gas in warfare. It will be able to treat an average of 500 slightly wounded patients, and is adequately equipped for about 180 operations per day. The hospital has a special plant which in case of emergency can furnish light, heat, hot water and fresh air. Cost of building and equipment of the hospital was approximately 800,000 Swiss Francs.—*The Medical Woman's Journal—April '41. Pp. 117.*

Our Mental Habits

1. Over-sensitiveness to criticism is one of the dangers to mental health. Many do not appreciate the damage to the mind that comes from nursing a slight or mulling over in the mind a fancied wrong. If some one has criticised and the criticism is unjust or unfair, it would be better to treat the criticism as foolish and the critic as unreasonble and to forget it instead of resisting it and wasting energies over it. But if the criticism is a just one, one should swallow one's pride, bow the knee and learn.

2. Worry is one of the commonest forms of abnormal mental functions. It represents a situation created by civilization with its many long-range apprehensions, fears and outcomes. One has to train himself to cultivate and develop that mental quality which will offset and neutralise and make completely harmless the tendency to worry. In the case of lower animals it is the immediate danger which provides the stimulus. What about tomorrow's food and shelter or work, is of no concern to a cow or a dog, as it is to a man. The elaboration of the cerebro-spinal nervous system has brought into the field of mental activity fears and anxieties that have a long range quality and hence cannot be met at once

To such situations as these there must be presented a philosophy of life, a point of view, a characteristic reaction that will enable the person to meet the problem however complex it may be. At the outset it is to be noted that a wholesome mental attitude cannot be acquired suddenly. It is never a gift and it has always to be won. It comes by presistent and conscious attempt to see straight and to keep to values of life clear. Given the same situation different people react differently. One becomes neurotic, another is untroubled and to a third his nerves will be shattered to pieces. This leads us to conclude that it is not the situation that is solely responsible for the ill health or suffering but the individual's reaction to the situation that was responsible for the result. Unless, therefore, we make our mind a strong fort to resist and neutralise external stimuli and to keep it always untroubled as far as possible in any given circumstances, we are very likely to be swept away by the first storm in our life. It is therefore our earnest desire to show in these columns, from time to time how to rectify our mental habits and to withstand such storms in life. —*Human Affairs, Feb. '41.*

Coffee

IT contains about 1 per cent of caffein. For use as a beverage the infusion should be made of the strength of 1 ounce or more to a pint of boiling water. It is a mistake to boil the coffee as the aroma is thereby lost. Coffee is sometimes adulterated with bone sugar or chicory. Coffee is like tea a stimulant but it differs in checking the action of the skin and encouraging the action of the bowels. Digestion is somewhat retarded by coffee but not to the same extent as by the tea. Over-indulgence in coffee causes indigestion, sleeplessness, palpitation as in the case of tea.

Respiratory Infection

Colds:—Colds are mild respiratory infections and their complications are the most common infections that the physician is called upon to treat. In spite of their prevalence little is known regarding specific therapy. The general consensus of opinion is that it is a virus disease spread through contact with infected invividuals, and that it is not simply a case of "open the window and influenza". The only draughts in this world that are of value are bank drafts, and they are all too few at the present time. Drafts don't cause colds any more than cold feet or wet clothes, and physicians dealing with small infants, especially premature ones, should realize this because it is the complication of head colds that carries off premature and weakly infants with broncho-pneumonia. Colds are best treated by prevention as is well illustrated by the old New England epitaph :

"Here lies our wife, Samantha Proctor :
She catched a cold and wouldn't doctor ;
She could not stay; she had to go.
Praise God from whom all blessings flow."

This makes Samantha out a stubborn ignoramus, which is manifestly unjust. No doctor could cure a cold then, and no doctor can cure a cold now. Until the scientists find out a great deal more about it, "An untreated cold lasts fourteen days, while a treated cold can be cured in fortnight." These somewhat jocular remarks are spoken in all earnestness to emphasise our helplessness in treatment, and to indicate the importance of prevention of contact of weakling infants with infected individuals. Lastly, all children of the run-about age and older should be kept in bed, not only till the temperature is normal, but till the patient is symptom free, in order to more readily prevent the more serious complications ; fortunately, however, in the past three years, chemotherapy has brought about more satisfactory results even in the smallest of infants.—*Texas State-Journal of Medicine, May, 1940—P. 780*

Good Health

I AM the cheapest thing in the world.

I am the secret of happiness ; without me the years are but a menace, old age a tragedy.

I offer myself to you, and you do not heed.

I bide my time. Tomorrow you will come to me begging, but I shall turn aside. I cannot, I will not, be ignored.

I hold your future in the hollow of my hand.

I am the most important thing in the world—

The one thing without which all else is impossible.

You ask me what I am, and I will tell you—

I am good Health !

—*Selected.—The Oriental Watchman.*

The difference between a literate and an illiterate man is the differene between the living and the dead,—*Dr. Johnson.*

Book Reviews

Sanskrit-Tamil Dictionary Supplement— *By N.E. Venkatesa Sarma.* Pp. 128. Re. 1/-

This useful Supplement is a compendium of the commonsense of the ancients—which, unfortunately, has now-a-days become most uncommon—containing information relating to morals, puranas, grammer and proverbs. It serves as a pocket dictionary of general informations, containing more than 700 Sanskrit verses with Tamil commentary on almost all subjects of elementary importance. It gives short notes on nealry 150 proper names, and explanations of about 150 Sanskrit proverbs. In the end, it gives nearly 1000 Sanskrit verbs of Dhatupatha with Tamil meanings, thus amply proving to be a worthy Supplement. The book can be had of N. E. Duraiswami Iyengar, 29, Ranganatham Street, Thyagarayanagar, Madras.

A Father's Letters to his Daughter.—*By Pandit Jawharlal Nehru* :—Translated into Kannada by Sri K. Krishna Rao, Publishers, Sahitya Bhandara, Hubli, Pp. 118. Price Re. 1-0-0 for an ordinary copy and Rs. 1-8-0 for a superior one.

This neat little book has already found a large circle of readers among the English-knowing public. The author and the publishers of this Kanarese edition have placed the Kannadigas under a deep debt of gratitude by bringing about this valuable publication. We congratulate them for their enterprise.

There are thirty-one letters in this book on various topics such as, the Book of Creation, how Ancient History has been written, the Creation of Earth etc., written by one of the greatest of Indians to his daughter. Though intended for the young, it is sure to interest elders also. It is the first of its kind in Kannada and has been written in a simple, pleasing style. We wish it will be added in the list of text books for High School classes. We recommend it to all Kannadigas.

The Madras Children's Aid Society (Annual Report for 1940.)—Established in 1926, this Society is run with the help of funds received both from the public as well as the government. Of the total amount of Rs. 49,188-7-8 received during May '40, the government grants amount to Rs. 18,786-1-0, the rest being donated by the public directly or indirectly. An exactly equal amount was spent. But it does not mean that the Society is in no need of funds. There is a need for greater accommodation. The need of a sixth Probation Officer for the Preventive work is also felt. Above all, a home for mentally defective children is keenly felt to be necessary. It is regrettable that the government have expressed their inability to help the Society in these matters at least for the present. We, therefore, appeal to the generous public to more actively sympathise with the Society by enrolling themselves in larger numbers, the annual subscription being only Rs. 5.

Home Remedies

Cancer

IT is a painful and usually fatal disease. It frequently begins as a hard lump or thickening in the breast, womb, scrotum, lip, tongue, stomach, or lower bowel causing shooting neuralgic pain and liable to increase at the expense of the surrounding parts. Before long, the absorbent glands are enlarged and the whole body wastes. Ulceration of the tumour is common with bloody or offensive discharge. Stomach is affected ; the symptoms are like indigestion. It is always better to consult a competent surgeon.

Treatment :—Early removal by surgical operation is the best means of preventing the spread of cancer. Medicinal treatment is absolutely of no use. Recently X-rays and radium have done some good.

* * *

Cataract

OPACITY of the crystalline lens interfering more or less with sight. As a rule, it is a disease of the old age. Patients with cataract usually see best in the dusk or with their backs to the light. Always consult an ophthalmic surgeon.

* * *

Catheter

AN instrument for drawing off urine from the bladder.

* * *

Chancres

CHANCRES are ulcers due to venereal innoculations and are of two kinds. One of them occurs singly and produces a hard lump but very little discharge ; the other is usually multiple, grows rapidly and discharges freely. The former is the more serious of the two. A good surgeon should be consulted.

* * *

Chicken-pox

IT is an infectious fever common in childhood. After an incubation period of about 13 days or more and slight feverishness lasting for one or two days or less, successive crops of pimples appear on the back, chest and other parts of the body and rapidly change into little bladders or vesicles. These become cloudy, dry up and fall off after 4 days. The whole illness lasts for about a week or 10 days and is not dangerous although catching.

Treatment. Keep the child in bed or at all events indoors. Give light food and prevent from scratching. Boric ointment on soft rags may be applied. Isolate the patient to prevent spreading.

* * *

Chlorodyne

A SECRET preparation, said to contain chloroform, morphine, prussic acid and other drugs. This is a very powerful medicine used chiefly for the relief of pain and spasm. The dose is 5 to 10 minims in a little water but it is not very suitable for domestic use.

* * *

Choking

CHOKING-very large mouthfuls of food or marble, coin, etc., accidentally swallowed-may happen in one of the two ways. If the substance enters the larynx, violent coughing is excited. If it passes into the gullet, a feeling of suffocation follows. In such a case it may sometimes be dislodged by putting the finger down the throat so as to excite vomiting and thus removed. Should this fail, a surgeon must be consulted at once. When fish bones, pins or other small pointed bodies stick in the throat, fluids should not be given but dry diet consisting of bread or pudding and plantain, which will often carry the offending body safely through the bowels.

* * *

Cholera

A DISEASE characterised by vomiting, purging, cramps and collapse. It spreads from time to time as epidemics. The disease attacks all ages, strong as well as delicate either sudden or after more or less diarrhœa of ordinary kind. The chief source of infection is through contaminated drinking water or milk. The attack begins suddenly with vomiting and purging or be preceded by nausea and oppression. At first the rejected substances consist of the contents of the stomach and the bowels more or less, biles strained Later on, the evacuations are pale, watery and offensive, resembling rice water. The diarrhœa is at first painless but may become associated with painful colic and later on the patient suffers from severe pain at the pit of the stomach, cramp in the limbs, oppression in the chest and passes into a state of collapse with intense thirst, cold tongue and breath, husky voice and clammy cold skin. During this stage the urine is often suppressed and vomiting and purging may cease. If death does not carry off the sufferer, the reaction sets in, after a while, symptoms of fever. One of the earliest signs of improvement is the reappearance of bile in the vomitted matter and motions.

Prevention. Do not take anything unless it is boiled. Boil all milk and drinking water. Avoid food which is indigestible. Avoid unnecessary use of purgative during the epidemic and do not neglect diarrhœa however slight.

Treatment. During the early stages, the main indication is to get rid of all the poisonous contents of the bowels. A tablespoonful of castor oil should be given at once. If there is vomiting, copious drafts of tepid water should be given. Excessive vomiting may be controlled by drinking ice water at short intervals. As long as diarrhœa continues, the patient should keep in bed and take no food except iced milk or iced soda water and milk Cramps in the legs are best relieved by friction. Always segregate the patient to avoid infection to others.